# Fire and Iron I

he dragon is the reigning symbol of Chinese mythology. Symbolizing wisdom and the power of the empire, it also represents the ambiguous force of fire that, while annihilating and destroying, also evokes life, enables growth, and feeds transformation. If the object of such legendary symbols is to represent the complex realities - day-to-day phenomena that thwart comprehension -, the figure of the dragon is apposite and challenging.

China is dominant theme of this beginning millennium. A country home to 20% of the world population that has grown at the unprecedented rate of 9.4% or over the last 26 years, when 200 million of the country's inhabitants rose above the poverty line, with a gross domestic capital formation of 45% of its GDP, US\$600 billion in FDI received, an trade volume of 70% of GDP, and US\$700 billion international reserves accumulated. Boasting an extensive list of attributes, China influences all major economic variables of the global scenario. The fire of the Chinese dragon's breath reduces prices to ashes and obliterates jobs around the world, while simultaneously regenerating projects and stimulating production in so many other places. Notwithstanding this, the Western world still understands very little of the dynamics of China's economy, the predictability of its public policies, the mechanics of its business logic, the scale of its social demands, the leanings of its legal structure, a highly disproportionate lapse in relation to the country's importance to world economics and geo-politics. Enigmatic as the sphinx, the dragon, which always makes its presence felt, inflames perception while, simultaneously and successfully blurring comprehension.

There is power in transformation and understanding its nature is today's analytical challenge. How will the implications and changes in the Chinese economy impact our investment portfolio? We must bear in mind that a substantial portion of the Dynamo Cougar portfolio relates to the performance of certain commodities, specifically, iron ore and steel, whose price dynamics have been almost entirely set by the Chinese market. As part of our fiduciary duty, in June we went to Asia where we had the opportunity to test in loco the assumptions on which our investments in these assets were based, and we will now present our impressions and conclusions. While we do not intend to anticipate our conclusions, we remain confident about these investments and recent data have merely substantiated our opinion that, at the beginning of 2005 was contrarian but which, as from May, prevailed among investors in general.

Given the enormous scope of the data, we have divided this topic into three Letters. Before specifically discussing the industries that affect us, we suggest to take a short détour in order to place these sectorial implications in a wider dimension. Accordingly, this Letter presents some notes on the evolution of the reforms which help to locate the current environment of the Chinese economy and to identify the chief challenges it will encounter in the near future. This is an exercise of intellectual curiosity and makes no claim to be original, since a number of specialized analyses already exist. As always, our website pro-

### Our Performance

During this second quarter, Dynamo Cougar shares incurred a 7.1% loss, totaling 8.2% for the year to date. The *Ibovespa* index dropped by 5.9% and the IBX by 3.4% for the quarter, a half-year closing of -4.4% and -0.4%, respectively. Since the Fund started operations in September 1993, Dynamo Cougar has recorded a return of 29.2% over the *IGP-M* and 34.1%  $^{p\alpha}$  in US dollars. During this same period, *Ibovespa* gained 7.4%  $^{p\alpha}$  in *IGP-M* and 11.5%  $^{p\alpha}$  in US dollars.

We took advantage of April's significant market drop to increase the Fund's exposure in some of our principal positions: Gerdau, CVRD, and Ambev. We also acquired two new shares: Lojas Renner and Localiza. We purchased the former in an IPO and, for the latter, just after the IPO. Even with these two new investments and, in addition to keeping cash stable throughout the quarter (close to 10% of net worth), the Fund's concentration level increased.

As during the first quarter of the year, some of the portfolio's intermediary positions performed badly: this time these were Duratex, Fertibrás, Ipiranga, and Ripasa. However, long steel investments (Gerdau and Belgo) weighed in substantially and were responsible for 50% of the negative result. The indications of steel product price drops arising from a potential excess of supply from China caused global investors to reduce their exposure in this segment. In our opinion, this movement across the board failed to consider the outstanding competitive position of Brazilian long steel producers. On the topic of China covered here, in our next two Letters we shall examine in detail the basis of our investments in iron ore and steel segments.

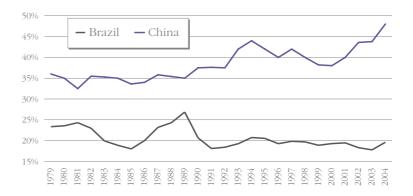
vides a number of interesting bibliographic references.

The mood here is of an informal account of our meetings, conversations, and readings. Here and there, some ideas can appear and may be useful as the basis for understanding key microeconomic aspects of the Chinese economy. These, in turn, will be analyzed in subsequent Letters in a more organized and systematic manner, when we will examine the implications of the Chinese growth on our iron ore and long steel investments.

### The Transition Model – Nature of the Reforms

Economists have agreed on two reasons for China's rapid growth: i) Its high investment capacity, internal savings, and, to a lesser degree, overseas investments; ii) Accelerated productivity growth. Even given that China has always recorded internal savings rates that are historically high by international standards (see Chart ), there is no doubt that the economic reforms begun in 978 contributed to this successful combination. Understanding the nature of these reforms is essential to comprehend the current dynamics of this formidable economy.

When new and complex phenomena happen and traditional models don't help to explain, perplexity and lost of projection power are on their way. China has subverted public policy prescriptions for economies in transition from a socialist to a capitalist system. In the early nineties, economic policies for Eastern European prescribed, in a tight schedule, a series of top-down measures consisting of stabilization, liberalization, privatization, and democratization. The shock package imposed an immediate and radical reform of the pricing system without pausing to examine the institutional peculiarities of each country. "Get the pricing system working as fast as possible and the rest will fall into place". The initial impact of this big bang approach was an unexpected and accentuated drop in production, increased inflation, and deteriorating social indicators in the countries where it was applied. Ignoring standard textbooks, China fo-



Source: IIE e IPEA

cused on a gradual, evolutionary, and experimental approach, one that sought to respect the existing institutional environment and enabled the country to incorporate the responses from individual choices throughout the entire process.

China's post-war development strategy, the Great Leap Forward was disastrous. Its aim of forced growth focusing on heavy industry, so alien to the country's natural vocation, simply resulted in a macro-economic distorted price environment (low interest rates, currency appreciation, low salaries, and cheap raw materials and basic consumption industrial consumption goods) allied to extremely low micro-economic efficiency levels, all arising from the flawed allocation of resources, minimal competitiveness, and the absence of incentive mechanisms.

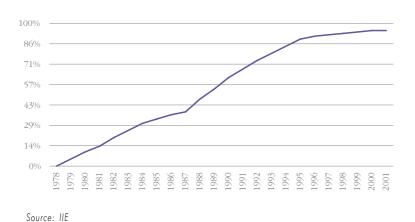
#### The reforms begun in

978 heralded the government's radical change of direction, and the determining planning system came gradually to be replaced by market resource allocation mechanisms. Since then, China has grown at an average rate of 9.4% pa. The productivity rate of the factors that, during the pre-reform period (953-978) had been consistently negative, rose to 2.5% over the following ten years. A more detailed examination of the Chinese model reveals some interesting facts: despite its undemocratic nature, the Chinese transition process was distinctly "federalist"; although non-private, it showed elements of a "market" transition.

The logic of the Chinese transition was based on policies gradually introducing market forces. The reforms sought to introduce a free pricing system by allowing competitiveness to increase allocation efficiency and factors productivity. In the food segment, the communal system was replaced by family responsibility whereby farmers began selling their excess production. The dual track price system was introduced into the industrial segment where, having produced the physical volumes required by central planning, companies could freely negotiate their excess production. In other words, the emphasis on fulfilling production quotas was gradually phased out and replaced by the profitseeking approach where cost calculations became an intrinsic economic decision factor. An example: In 98, the steel industry production quota was 3.9 million metric tons, where domestic production was 26.7 million metric tons. In 990, this quota was increased to 5.6 million metric tons, a growth of only 3% in ten years, despite domestic production having soared to 5.5 million metric tons. In other words, under the central planning system, steel production dropped from 52% to a mere 30% of total production. Chart 2 presents the growth of market involvement in China's retail pricing system.

Simultaneously, to enable production units and individuals to benefit from these productivity gains, the reform program prioritized a change in micro-economic incentive patterns. Gradual adjustments were applied to the incentive system towards more closely linking execu-

Chart 2 – China - Market price formation in retail goods (%)



tive compensation to business performance, via such mechanisms as retained profits, bonus systems, and profit-sharing policies. Government-run organizations were allowed increased autonomy in decisions regarding production, purchasing, investments, and pricing. Competing local governments encouraged the advent of a large number of small companies (known as Township and Village Enterpris-

es or TVEs) that born and grew responding to market signals, rivaling in prices and costs. The TVEs multiplied rapidly and at a surprising rate. In 993, they totaled

68 thousand production units, responsible for 57 million jobs and for the greater part of industrial production for that same year (Chai 2003), and placed pressure on Government companies, which had to implement improved efficiency policies. By 200, 82% of China's industrial production derived from the non-government seg-

ment as shown in the following table.

In the late 90's, the TVEs began to be replaced by private domestic and foreign companies. Beijin relied heavily on tax incentives to attract foreign capital and technology, which were absorbed through joint ventures with local partners. Special trade zones were also encouraged and, more recently, a trend to change in the property ownership system has been observed, thanks to the advance of privatization policies.

Chinese reforms did not comply strictly with any previously established time schedule or any intentional planning designed from scratch. They grew incrementally and experimentally, in line with the needs, conditions, and feedback of a number of agents at different times. "Crossing the river by groping the stones" is a good metaphor for the Chinese sequential transition model. Perhaps the chief component of this model was indeed its decentralized character that enabled the pricing system to capture knowledge and expectations of innumerable widely distributed participants.

However, this hybrid transition process – the co-existence of a market and a

#### Companies - Share in Gross Domestic Product (%)

ByOwnership	1978	1985	1997	2001		
State	78	65	26	18		
TVEs	22	32	38	14		
Domestic Private	-	2	18	39		
Others Private	-	1	18	29		
Source: Chai 2003 e EIU (Economist Intelligence Unit)						

planning system - led to ambiguities and tensions that sometimes held back these reforms. Production growth, fluctuating between  $3-4\%^{pa}$  and  $3-5\%^{pa}$ , reflects this non-linear aspect of the transition system. Periods of increased decentralization and autonomy were followed by stricter quotas and administrative controls. Lin, Chai, and Li (op. cit.) succinctly described the cyclical nature of the program: "Vigor leads to disorder, disorder leads to retrenchment, retrenchment leads to stagnation, stagnation leads to decentralization", decentralization leads to vigor and, rapidly thereafter, to disorder. For example, the increased autonomy of decisions of government-run companies associated with minimal capex discipline resulted

in an excess of non-productive investments, which were promptly followed by stricter controls imposed on managers and restrictions imposed on banks in granting loans to the system.

A number of ventures during the transition arose spontaneously, some of them contrary to the will of their planners. An example of this occurred in 978, when the municipality of Fengyang, in Anhui Province, began implementing a leasing system from communal land, and split production quotas among the families, who would then be permitted to appropriate that portion of the harvest over and above the established auotas. At that time, this family responsibility system was prohibited by the Central Planning Committee, which imposed the collective rural ownership system. That was the year of a drought resulting in reduced production for all the local communities, with the exception of Fengyang, which recorded a 30% growth. Shortly thereafter, almost all the other provinces imitated the family responsibility system. In other words, in practice, the Chinese model respected the basic theoretical insight that spontaneous/ genuine entrepreneurship is the element

that enables the market system to develop its coordination activities and thus generate the necessary signals for scant resources to be more efficiently allocated.

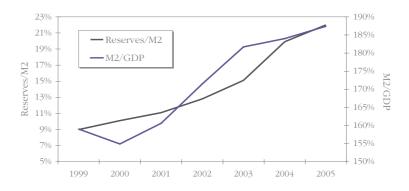
A more in-depth examination of the transition model requires studying the historical, political, cultural,

sociological, and institutional references that led to the relative success of capitalist practices in an autocratic regime. This would neither be appropriate here nor are we in a position to carry out this task. We can, however, list a few pertinent elements: i) The Chinese people acquired a millennial tradition of entrepreneurial activity and market economy. Production was staterun for a mere twenty years. With the advent of the reforms, this entrepreneurial memory rapidly prevailed, bringing with it creative and productive "from the bottom up" responses. ii) Taoist/Confucian traditions encourage behavior that promotes a market system, like emphasis on social order, on learning, on moral standards, on commitment. iii) Contrary to what one might imagine, the Chinese transition process involves very little ideology. The heavy atmosphere of dissatisfaction of the people arising from the doomed state policies of the Cultural Revolution showed the Party that, only by generating jobs and providing growth deriving from increased productivity, would they acquire the social lubricant essential for the political logic of perpetuating power. Today, we can safely say that China has little of communism, being better defined as a form of autocratic capitalism or, as used to be the expression, state capitalism.

Reforms usually have to deal with uncertain events, since they involve a number of variables and behavioral answers whose dynamics is poorly known. This is why experimenting was so useful. In addition to their non-linear course, to reduce performance risks, the Chinese reforms also attacked problems as they increased in difficulty. This means that some sensitive areas have not yet been addressed; a potentially greater risk in the future path of the transition. Here we briefly list some of the chief challenges faced by the Chinese economy.

Increased costs and duced profits. If the dearth of specialized labor is well known, more recently a lack of unspecialized labor is becoming a problem in some areas. In some seaments and regions, such as textiles and toys in coastal areas (Pearl River Delta), the minimum wage has increased by 40%, encouraging a trend to outsourcing production to neighboring countries such as Pakistan, Cambodia, Vietnam, and India. Raw material costs have also risen, forced upwards by commodity prices, thereby pressuring corporate profits. Private companies' profit margins after taxes dropped from 7.9% in 997 to 3.9% in 2004<sup>2</sup>. Moreover, this excess capacity, arising from high fixed capital investment rates together with little capital discipline has pressured profit margins in a highly competitive environment where pricing power is not allowed.

Excess investment and increased consumption. In the words of a local Chinese economist, "To under-



Source: Dynamo

stand China, bear in mind that the cost of capital is zero". Capital is widely available at absurdly low rates from banks and credit organizations for companies wishing to generate jobs. The average cost of corporate debt of companies we have met was close to two percent. Based on a business logic that prioritized jobs rather than return on invested capital, fixed capital investments were the main thrust behind economic growth, but this model seems now on the verge of depletion. In the outskirts of Hangzhou, enormous and completely vacant, newly built, industrial and commercial spaces are a common sight. The challenge today is to make consumption replace investment in aggregate demand. Companies are trying to make a step ahead on value chain, supplying products of better quality and design, along with increased advertising, marketing, and costumer services, in order to attract the potential consumption of an estimated middle class of 250 million people. Nonetheless, China's savings culture still prevails in households decisions, and for a number of reasons. Among these are: low prices are an historical criterion in consumption choices, inequitable distribution of income, an unstable social security structure (low coverage, absence of portability), the limited scope of health services and public education, a still minimal consumer credit system, in addition to unfavorable demographic factors<sup>3</sup>.

Government-run Companies. Despite its productivity gains, the public sector is still extremely inefficient,

and a more in-depth corporate reform is essential. One-third of industrial production is still generated by state companies and it is estimated that at least half of them run at a deficit, and survive on subsidies, particularly from banks. The transition model will not be complete (when pricing is entirely free) until government-run companies are competing on equal terms with non-government organizations. In other words, if state companies do not become competitive the opposite bank of the river will never be reached.

Banking System. Government banks subsidize state companies and also play an important role in monetary policy since they are obliged to buy public securities at absurdly low rates, in order to permit the sterilization of international reserves. The most reliable statistics of non-performing loans are about 30% of the GDP, i.e., close to US\$450 billion. Most of them are estimated to have been contracted by these same state companies that absorb 50% of government bank loans. Despite having undergone a long restructuring process, that includes operating reforms and capital injections, China's four major government banks are still limited by regulatory restrictions and continue to record weak profitability levels. Moreover, this sector is particularly susceptible to corruption, since the criteria for obtaining loans are frequently political.

The Capital Market. The bond market, dominated by public se-

<sup>(2)</sup> Data presented by MIT Professor Huang Yasheng at the China Effect conference sponsored by the Brazil-China Business Center in October 2005.

<sup>(3)</sup> For example, government policy of one child per couple, imposed in 1978 by Deng Xiaoping, causes insecurity regarding the support of parents in their old age, and encourages savings higher than those normally required for traditional life cycles (cf. The Economist n. 8445, September 2005).



Source: IIE

curities, represents only 20% of the GDP, and the stock market only 0% of the GDP. However, at the close of 2004, bank loans represented no less than 40%. Domestic investments are basically financed by the banks and by companies' retained earnings. Equity market is poorly regulated. Problems such as tunneling, bad accounting practices, insider trading, informality, private benefits, absence of transparency, among others, are quite frequent, without even discussing the total

absence of capital discipline and mechanisms for aligning shareholder and executive interests. During one of the conferences we attended, a company presented a slide on 'corporate governance' in which it emphasized its position as the highest taxpayer in its sector... There is no corporate law although the CSRC (China's SEC) is currently closely investigating these matters. While the agents waste time in endless

discussions about how to resolve the problem of unlisted shares<sup>4</sup>, the Chinese Stock Exchange has incurred losses of 60% over the last five years and still negotiates in a P/E ratio of 8x. In other words, the downside risk remains substantial.

Agriculture. This sector is still inefficient with its low productivity levels

and minimal mechanization. Subsidies and trade barriers are frequent, and drain funds from more productive sectors. Meddling in the rural ownership structure is a highly sensitive problem in China. There is a cultural aspect of family/religious traditions, deeply rooted in Chinese sociology of relationships, which originates in the family's link to the land. During one of our meetings with a fertilizer company, when we enquired about potential growth in demand for the product that could result

#### Dynamo Cougar x IBX x Ibovespa Performance up to june/ 2005 (in R\$)

Period	Dynamo Cougar	IBX	Ibovespa				
60 months	270,15%	138,66%	51,25%				
36 months	175,14%	148,69%	125,18%				
24 months	103,27%	113,36%	94,01%				
12 months	29,39%	36,05%	20,44%				
3 months	-7,08%	-3,40%	-5,23%				
NAV/Shareon06/30/2005=R\$79,176689430							

from a broad reform of the structure of countryside production, the executive immediately replied that such assumption was not even cogitated between industry players.

Infrastructure bottlenecks. Transportation and energy problems have a potential to stifle future growth. IDB estimates that infrastructure problems have already diminished growth by %pa. The occupancy rate of Chinese railways is twice that of the US and five times greater than that of India. But nobody can make a profit on a business that shows a return on invested capital of close to one percent.

The external sector. The rapid accumulation of reserves has created problems for China to manage monetary policy (see chart 3). Until now, Government has mainly used sterilization mechanism, which should be reduced as an essential condition to banking reforms, thereby possibly generating inflationary pressures. A further aggravation is that the trade surplus has increased even further this year (see table 4), with the end of the weightier process of substituting imports. The diffident revaluation of the renminbi is expected to have little impact in trade balance results.

Fragile Legal Structure. China lacks a transparent judicial and legal system regulating business and guaranteeing enforcement of contracts. It is

widely agreed that corruption, bribery, smuggling, forgery, piracy, absence of property rights, manipulation of statistics, and informality are common practices<sup>5</sup>. Corruption indicators at levels significantly higher than those of comparable countries are explained by three factors: i) the dimensions of the public sector and its autocratic nature, ii) a longstanding history of pub-

lic bureaucracy allied to the irrefutable power of the empire, iii) the traditional business culture in China, based on guanxi, i.e., mutual relationship, reciprocity in network, and not on any meritocracy or contract system. The Central Government has sought to address these problems but with little success, since they mostly occur in reasonably autonomous local governments and companies. As explained to us

<sup>(4)</sup> The majority of Class A shares are held by the Government and are not listed. Some analysts claim that this structure is responsible for some of the chief flaws of the Chinese capital market: reduced free-float, obstacles to wider distribution of capital, lack of liquidity, absence of a corporate market for control, non-aligned interests. The Government fears losing control of the companies by listing these shares in an environment where the insiders (reasonably independent management) are already major stakeholders.

<sup>(5)</sup> Almost all important social and economic analytical references on China include the term 'corruption' and/or related words on their subject indexes, such as, Shirk (1993), Naughton (1995), Lardy (1998), Webber, Wang, and Ying (2002), Wong and Ding (2002), and Shenkar (2005).

by a consumption company executive, "In China, it is worth knowing how to dance with local government". Some analysts believe that the recent slow down in FDI is a symptom of the high cost of doing business in China.

Social Problems. As a result of the rapid growth that occurred in the transition period, a number of social and environmental problems have arisen, among them pollution (nine out of ten of the world's most polluted cities), inequitable distribution of income, absence of a social security system, accelerated urbanization, high delinquency rates, unemployment, and epidemics. China also has a severe AIDS problem. A 2002 UN report

states that if measures are not taken, this problem can rise to "catastrophic" dimensions, and generate "social devastation", reducing the country's GDP by up to 2.2% over the next fifteen years. Social needs are enormous and repressed – approximately 300 thousand Chinese attempt suicide annually.

In other words, a number of challenges will have to be faced for China to maintain a pattern of growth compatible with that of the last thirty years. Signs of cool-down, quite natural at this stage of the Chinese economy's life cycle, have become evident. Deceleration appears to be on its way, which does not necessarily represent rupture nor a hard land-

ing. The general consensus is that China will continue growing, but at lower rates of around seven to eight percent per annum. This perceived soft landing derives from the analysts' confidence in the Chinese Government's capacity to conduct and formulate policy. Given the greater sensitivity of reforms from now on, this skill will be increasingly tested, a situation that will require closer monitoring of the dragon's rumblings. In our next Letter, we shall specifically discuss the impacts of this growth on the iron ore and steel sectors.

Rio de Janeiro, March, 27th, 2006.

# Dynamo Cougar x Ibovespa x FGV-100 (in US\$ dollars)

	DYNAMO COUGAR*			FGV-100**			IBOVESPA***		
Period	Quarter	Year to Date	Since 01/09/93	Quarter	Year to Date	Since 01/09/93	Quarter	Year to Date	Since 01/09/93
1993	-	38.78	38.78	-	9.07	9.07	-	11.12	11.12
1994	-	245.55	379.54	-	165.25	189.30	-	58.59	76.22
1995	-	-3.62	362.20	-	-35.06	87.87	-	-13.48	52.47
1996	-	53.56	609.75	-	6.62	100.30	-	53.19	133.57
1997	-	-6.20	565.50	-	-4.10	92.00	-	34.40	213.80
1998	-	-19.14	438.13	-	-31.49	31.54	-	-38.4	93.27
1999	-	104.64	1,001.24	-	116.46	184.73	-	69.49	227.58
2000	-	3.02	1,034.53	-	-2.63	177.23	-	-18.08	168.33
2001	-	-6.36	962.40	-	-8.84	152.71	-	-23.98	103.99
1stQuar/02	13.05	13.05	1,101.05	3.89	3.89	162.55	-2.76	-2.76	98.35
2 <sup>nd</sup> Quar/02	-19.15	-8.60	871.04	-22.45	-19.43	103.60	-31.62	-33.51	35.63
3 <sup>rd</sup> Quar/02	-22.31	-28.99	654.37	-31.78	-45.04	38.90	-44.17	-62.88	-24.28
4thQuar/02	29.76	-7.86	878.90	38.00	-24.15	91.67	45.43	-46.01	10.12
1stQuar/03	4.47	4.47	922.65	4.63	4.63	100.55	5.39	5.39	16.06
2 <sup>nd</sup> Quar/03	27.29	32.98	1,201.73	38.16	44.55	177.07	34.33	41.58	55.91
3 <sup>rd</sup> Quar/03	19.37	58.73	1,453.83	24.72	80.29	245.56	22.34	73.20	90.74
4thQuar/03	22.18	93.94	1,798.51	35.98	145.16	369.91	39.17	141.04	165.44
1stQuar/04	4.67	4.67	1,887.16	2.35	2.35	380.16	-1.40	-1.40	161.72
2 <sup>nd</sup> Quar/04	-4.89	-0.45	1,790.04	-8.66	-6.51	339.30	-11.31	-12.56	132.11
3 <sup>rd</sup> Quar/04	35.12	34.52	2,453.91	23.73	15.67	443.56	21.13	5.92	181.16
4thQuar/04	22.17	64.35	3,020.19	25.32	44.96	581.16	21.00	28.16	240.19
1stQuar/05	-1,69	-1,69	2.967,41	-1,66	-1,66	569,87	1,06	1,06	243,80
2°Trim/05	5,41	3,62	3.133,23	2,98	1,27	589,80	7,51	8,65	269,60
		Average Ne	t Asset Value	for Dynamo Co	ugar (Last 3	36 months):	R\$ 276.733.59	94,47	

<sup>(\*)</sup> The Dynamo Cougar Fund figures are audited by Price Waterhouse and Coopers and returns net of all costs and fees, except for Adjustment of Performance Fee, if due. (\*\*) Index that includes 100 companies, but excludes banks and state-owned companies. (\*\*\*) Ibovespa average.

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